A-F
I-fw

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado 80527-2400

PATENT APPLICATION

ATTORNEY DOCKET NO. **100111538-1**

**IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor(s): Paul D. Bliley, et al.	Confirmation No.: 1563
Application No.: 10/692,263	Examiner: Renata D. McCloud
Filing Date: October 23, 2003	Group Art Unit: 2837

Title: **CONFIGURABLE H-BRIDGE CIRCUIT**

Mail Stop Appeal Brief-Patents
Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Non-Compliant Appeal Brief Supplement

Transmitted herewith is the ~~Appeal Brief~~ in this application with respect to the Notice of Appeal filed on ___06/19/2006___ . *and subsequent Notice of Non-Compliant Amendment mailed* ~~The fee for filing this Appeal Brief is (37 CFR 1.17(c)) $500.00.~~ ___August 29, 2006___ .

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☐(a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

☐ 1st Month $120   ☐ 2nd Month $450   ☐ 3rd Month $1020   ☐ 4th Month $1590

☐ The extension fee has already been filed in this application.

☒(b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of ~~$ 500~~ . At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

☒ I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:
Commissioner for Patents, Alexandria, VA 22313-1450

Date of Deposit: September 27, 2006

OR

☐ I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number (571)273-8300.
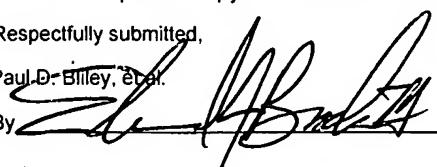
Date of facsimile:

Typed Name: Sarah L. Reinhard
Signature:

Respectfully submitted,

Paul D. Bliley, et al.

By

Edward J. Brooks III

Attorney/Agent for Applicant(s)

Reg No. :	40,925
Date :	September 27, 2006
Telephone :	(612) 236-0120

Rev. 10/05 (AplBrief)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	10/692,263
Appellants:	:	Paul D. Bliley, et al.
Filed:	:	October 23, 2003
TC/A.U.	:	2837
Examiner:	:	Renata D. McCloud
Title:	:	Configurable H-Bridge Circuit

<u>NON-COMPLIANT APPEAL BRIEF SUPPLEMENT</u>

MS APPEAL BRIEF-PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir or Madame:

This supplement is presented under MPEP § 1205.03(B) in support of an

appeal from a Final Office Action of June 6, 2006, regarding the above-identified

application. Notice of the Appeal was filed under 37 CFR § 41.31 on June 19,

2006.

V.   SUMMARY OF CLAIMED SUBJECT MATTER

A.   Independent claim 1

Independent claim 1 recites a configurable H-bridge circuit (page 3, line 5; page 4, lines 1-12, and line 24 through page 5, line 1; page 5, lines 4-6, lines 8-15, and line 18 through page 6, line 6; page 6, lines 12-19; page 7, line 4, lines 9-10, and line 16 through page 8, line 3; page 8, lines 4-14, and lines 19-20; page 9, lines 8-25; page 13, lines 1-6; and Figures 1A-1B, and 2-5). The configurable H-bridge circuit includes two high switches (page 4, lines 1-7, lines 18-22, and line 23 through page 5, line 4; page 6, lines 16-23; Figures 1A-B, and 2) connected to a voltage source (page 3, lines 13-15; page 4, lines 3-6, and lines 18-22; page 6, lines 9-12, lines 16-19; and Figures 1A-B, and 2), two low switches (page 4, lines 8-10, and line 23 through page 5, line 4; page 6, line 24, through page 7, line 1; and Figures 1A-B, and 2) connected to ground (page 3, lines 15-16; page 4, lines 8-12; page 6, lines 24-25; and Figures 1A-B, and 2).

The configurable H-bridge circuit has a first configuration with high switches and low switches connected together and coupled by closing switches to independently drive a motor as a first H-bridge circuit configuration, and a second configuration of the configurable H-bridge circuit in which the high switches serve as first components and the low switches serve as second components (page 3, lines 5-17; page 4, lines 1-15, and line 19 through page 5, line 15; page 6, line 11, through page 7, line 5; page 7, line 17, through page 8, line 12; page 9, line 8, through page 10, line 10; and Figures 1A-1B, and 2-5), where each are coupled by closing switches to form a discrete switch where one high switch is coupled as a

2

first component of a switch supplying electricity to an electrically-powered component and one low switch is coupled as a second component of a switch supplying electricity to a different electrically-powered component, the second configuration being different than the first configuration. (Page 4, lines 1-15, and lines 18-22; page 5, lines 7-15; page 6, lines 1-6; page 8, lines 4-12; page 9, lines 6-22; and Figures 1A-1B, and 2-5).

B.   Independent claim 4

Independent claim 4 recites an application-specific integrated circuit (ASIC) (page 3, lines 6-17; page 5, lines 7-10, and 16-18; page 6, lines 7-8; page 9, lines 1-5; page 12, lines 19-21; and Figures 2 and 5) that includes a configurable first H-bridge circuit (page 3, line 5; page 4, lines 1-12, and line 24 through page 5, line 1; page 5, lines 4-6, lines 8-15, and line 18 through page 6, line 6; page 6, lines 12-19; page 7, line 4, lines 9-10, and line 16 through page 8, line 3; page 8, lines 4-14, and lines 19-20; page 9, lines 8-25; page 13, lines 1-6; and Figures 1A-1B, and 2-5).

The configurable H-bridge circuit, by alternative closing of switches, includes a first configuration as a first motor drive circuit to drive a first motor, and includes a second configuration as discrete switches, each of the discrete switches configured to be coupled to supply electricity to independent electrically-powered components (page 3, lines 5-17; page 4, lines 1-15, and line 19 through page 5, line 15; page 6, line 11, through page 7, line 5; page 7, line 17, through page 8, line 12; page 9, line 8, through page 10, line 10; and Figures 1A-1B, and 2-5), and a configuration register configured to maintain an indicator of the configurable first H-bridge circuit configuration as at least one of the first motor drive circuit or as the

3

discrete switches to supply electricity to independent electrically-powered components. (Page 5, line 16, through page 6, line 15; page 7, line15, through page 6, line 12; page 9, lines 6-22; page 10, lines 18-23; page 11, lines 11-23; page 12, lines 11-18; and Figures 2-5).

Independent claim 4 is argued together with dependent claims 5-9.

C.   Independent claim 10

Independent claim 10 recites a printing device (page 3, line 9; page 4, lines 12-15; page 5, lines 4-6; page 6, lines 19-21; page 9, line 23, through page 10, line 18; page 10, line 24, through page 12, line 18; and Figure 5) that includes a first motor configured for movable control of at least a first component in the printing device (page 8, line 24, through page 9, line 2; and Figures 2, and 4), a second motor configured for movable control of at least a second component in the printing device (page 9, lines 2-5; and Figures 2, and 4), and a multiple H-bridge circuit including a first H-bridge circuit configured to independently drive the first motor, a second H-bridge circuit configured to independently drive the second motor (page 8, line 24, through page 9, line 2; and Figures 2, and 4).

The printing device further includes a configurable third H-bridge circuit (page 3, line 5; page 4, lines 1-12, and line 24 through page 5, line 1; page 5, lines 4-6, lines 8-15, and line 18 through page 6, line 6; page 6, lines 12-19; page 7, line 4, lines 9-10, and line 16 through page 8, line 3; page 8, lines 4-14, and lines 19-20; page 9, lines 8-25; page 13, lines 1-6; and Figures 1A-1B, and 2-5) that, by alternative closing of switches, has a first configuration as a motor drive circuit to independently drive a third motor, and a second configuration as discrete switches

4

that are each configured to be coupled to a different component as a component switch. (Page 3, lines 5-17; page 4, lines 1-15, and line 19 through page 5, line 15; page 6, line 11, through page 7, line 5; page 7, line 17, through page 8, line 12; page 9, line 8, through page 10, line 10; and Figures 1A-1B, and 2-5).

Independent claim 10 is argued together with dependent claims 11-16.

D.   Independent claim 17

Independent claim 17 recites a method that includes writing an indicator (page 5, line 16, through page 6, line 6; page 6, lines 8-10; page 7, line 15, through page 8, line 12; page 9, lines 6-22; page 12, lines 14-18; and Figures 3-5) to a configuration register (page 5, line 16, through page 6, line 15; page 7, lines 15-16; page 8, lines 4-9; page 9, lines 6-22; and Figures 2-5) to indicate an implementation by alternative closing of switches of a configurable H-bridge circuit (page 3, line 5; page 4, lines 1-12, and line 24 through page 5, line 1; page 5, lines 4-6, lines 8-15, and line 18 through page 6, line 6; page 6, lines 12-19; page 7, line 4, lines 9-10, and line 16 through page 8, line 3; page 8, lines 4-14, and lines 19-20; page 9, lines 8-25; page 13, lines 1-6; and Figures 1A-1B, and 2-5) as at least one of a motor drive circuit or as discrete switches (page 5, line 16, through page 6, line 15; page 7, line 15, through page 8, line 12; page 9, lines 6-22; page 10, lines 18-23; page 11, lines 11-23; page 12, lines 11-18; and Figures 2-5), coupling the configurable H-bridge circuit to drive a motor in an event that the configurable H-bridge circuit is implemented as the motor drive circuit, and coupling a discrete switch of the configurable H-bridge circuit as a component switch in an event that the configurable H-bridge circuit is implemented as the discrete switches to supply

5

electricity to electrically-powered components. (Page 3, lines 5-17; page 4, lines 1-15, and line 19 through page 5, line 15; page 6, line 11, through page 7, line 5; page 7, line 17, through page 8, line 12; page 9, line 8, through page 10, line 10; and Figures 1A-1B, and 2-5).

Independent claim 17 is argued together with dependent claims 18-22.

E.   Independent claim 23

Independent claim 23 recites a method that includes controlling a first movable component (page 8, line 24; and Figure 4, element 402) in a printing device (page 3, line 9; page 4, lines 12-15; page 5, lines 4-6; page 6, lines 19-21; page 9, line 23, through page 10, line 18; page 10, line 24, through page 12, line 18; and Figure 5) with a first motor independently driven by a first H-bridge circuit of a multiple H-bridge circuit (page 8, line 24, through page 9, line 2; and Figures 2, and 4), and controlling a second movable component (page 9, line 2; and Figure 4, element 404) in the printing device with a second motor independently driven by a second H-bridge circuit of the multiple H-bridge circuit (page 8, line 24, through page 9, line 2; and Figures 2, and 4).

The method further includes configuring by alternative closing of switches a configurable third H-bridge circuit (page 3, line 5; page 4, lines 1-12, and line 24 through page 5, line 1; page 5, lines 4-6, lines 8-15, and line 18 through page 6, line 6; page 6, lines 12-19; page 7, line 4, lines 9-10, and line 16 through page 8, line 3; page 8, lines 4-14, and lines 19-20; page 9, lines 8-25; page 13, lines 1-6; and Figures 1A-1B, and 2-5) of the multiple H-bridge circuit in a first configuration to independently drive a third motor in an event that the third H-bridge circuit is to be

implemented as a motor drive circuit, and configuring the third H-bridge circuit in a second configuration as discrete switches that are each configured to be coupled to a different component in an event that a switch of the third H-bridge circuit is to be implemented as a component switch. (Page 3, lines 5-17; page 4, lines 1-15, and line 19 through page 5, line 15; page 6, line 11, through page 7, line 5; page 7, line 17, through page 8, line 12; page 9, line 8, through page 10, line 10; and Figures 1A-1B, and 2-5).

Independent claim 23 is argued together with dependent claims 24-28.

F.   Independent claim 29

Independent claim 29 recites one or more computer-readable media comprising computer executable instructions (page 7, lines 8-14; page 8, 17-23; and Figure 5) for executing directing a printing device (page 3, line 9; page 4, lines 12-15; page 5, lines 4-6; page 6, lines 19-21; page 9, line 23, through page 10, line 18; page 10, line 24, through page 12, line 18; and Figure 5), writing an indicator (page 5, line 16, through page 6, line 6; page 6, lines 8-10; page 7, line 15, through page 8, line 12; page 9, lines 6-22; page 12, lines 14-18; and Figures 3-5) to a configuration register (page 5, line 16, through page 6, line 15; page 7, lines 15-16; page 8, lines 4-9; page 9, lines 6-22; and Figures 2-5) to indicate a configuration of a configurable H-bridge circuit (page 3, line 5; page 4, lines 1-12, and line 24 through page 5, line 1; page 5, lines 4-6, lines 8-15, and line 18 through page 6, line 6; page 6, lines 12-19; page 7, line 4, lines 9-10, and line 16 through page 8, line 3; page 8, lines 4-14, and lines 19-20; page 9, lines 8-25; page 13, lines 1-6; and Figures 1A-1B, and 2-5) as at least one of a motor drive circuit or as discrete switches by

alternative closing of switches. (Page 3, lines 5-17; page 4, lines 1-15, and line 19 through page 5, line 15; page 6, line 11, through page 7, line 5; page 7, line 17, through page 8, line 12; page 9, line 8, through page 10, line 10; and Figures 1A-1B, and 2-5).

The computer executable instructions further instruct configuring the configurable H-bridge circuit in a first configuration to drive a motor in an event that the configurable H-bridge circuit is to be implemented as the motor drive circuit, and configuring the configurable H-bridge circuit in a second configuration as the discrete switches in an event that a switch of the configurable H-bridge circuit is to be implemented as a component switch to supply electricity to independent electrically-powered components. (Page 3, lines 5-17; page 4, lines 1-15, and line 19 through page 5, line 15; page 6, line 11, through page 7, line 5; page 7, line 17, through page 8, line 12; page 9, line 8, through page 10, line 10; and Figures 1A-1B, and 2-5).

Independent claim 29 is argued together with dependent claim 30.

G.   Independent claim 31

Independent claim 31 recites a printing device (page 3, line 9; page 4, lines 12-15; page 5, lines 4-6; page 6, lines 19-21; page 9, line 23, through page 10, line 18; page 10, line 24, through page 12, line 18; and Figure 5) that includes means to independently drive a first motor to control a first movable component (page 8, line 24, through page 9, line 2; and Figures 2, and 4) in a printing device, means to independently drive a second motor to control a second movable component (page 9, lines 2-5; and Figures 2, and 4) in the printing device, means to configure by

8

alternative closing of switches a configurable first H-bridge circuit (page 3, line 5; page 4, lines 1-12, and line 24 through page 5, line 1; page 5, lines 4-6, lines 8-15, and line 18 through page 6, line 6; page 6, lines 12-19; page 7, line 4, lines 9-10, and line 16 through page 8, line 3; page 8, lines 4-14, and lines 19-20; page 9, lines 8-25; page 13, lines 1-6; and Figures 1A-1B, and 2-5) in a first configuration as a motor drive circuit to independently drive a third motor, and means to configure by alternative closing of switches the configurable first H-bridge circuit in a second configuration as discrete switches to supply electricity to independent electrically-powered components. (Page 3, lines 5-17; page 4, lines 1-15, and line 19 through page 5, line 15; page 6, line 11, through page 7, line 5; page 7, line 17, through page 8, line 12; page 9, line 8, through page 10, line 10; and Figures 1A-1B, and 2-5).

Independent claim 31 is argued together with dependent claims 32-34.

CONCLUSION

Appellant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner and/or members of the Board are invited to telephone Appellant's attorney Gregg W. Wisdom at (360) 212-8052 to facilitate this appeal.

At any time during the pendency of this application, please charge any additional fees or credit overpayment to the Deposit Account No. 08-2025.

CERTIFICATE UNDER 37 C.F.R. §1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS APPEAL BRIEF-PATENTS Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450, on this 27th day of September, 2006.

Sarah L Reinhard
Name

Sarah L. Reinhard
Signature

Respectfully Submitted,
Paul D. Bliley, et al.

By their Representatives:
BROOKS & CAMERON, PLLC
1221 Nicollet Avenue, Suite 500
Minneapolis, MN 55403

Atty: Edward J. Brooks III
Reg. No.: 40,925

Date: 9/27/2006

10